

Vermont Environmental Report

Pyramid Mall: An End May Be In Sight

On July 14, 1977, the Williston Planning Commission voted 6 - 1 to approve a subdivision application for a proposed Pyramid Mall. This approval sent the Pyramid application into Act 250 hearings before the District Environmental Commission No. 4.

The proposed mall would be a \$10 million, 80-store enclosed shopping center on 67 acres of land. It is the largest commercial development ever to come under Act 250 review. It would be built at the intersection of Routes 2 and 2A in Williston, a town of 4,400 people, six miles east of Burlington and adjacent to Exit 12 of Interstate 89.

Since last August, VNRC Staff Attorney, Darby Bradley, has been following the Pyramid hearings before the District Environmental Commission. He has been providing legal advice to the Williston Committee for Responsible Growth that is opposing the Mall.

In the following report, Bradley speculates for the first time on the possible outcome of the Pyramid application.

With the first signs of spring have come the first signs that suggest that the proposed Pyramid Mall may not be built after all. It is still far too early to make a definite pronouncement. The Pyramid Company continues to pursue the necessary approvals with apparent confidence in the final result. But after months of hearings in which everything seemed to be going Pyramid's way, some difficult obstacles now have emerged that could block the development.

(1) Town versus Regional Plan

Hours and hours of testimony and hundreds of pages of legal briefs have been devoted to the question of whether the Williston Town Plan is a valid document. The issue is important. If the Williston Town Plan was not "duly adopted," Pyramid's application for development will be required under Act 250 to conform to the Chittenden County Regional Plan. The proposed Pyramid Mall conflicts with the Regional Plan on several points.

Although the District Environmental Commission has not yet made a definitive ruling on the validity of Williston's adoption procedures, and therefore the validity of Williston's Town Plan, the Commission did decide that the Regional Plan was relevant evidence, and

asked that it be submitted. This action perhaps indicates the direction that the Commission is leaning towards on this issue.

(2) Traffic Impact

In a presentation using computer models, two witnesses for the Chittenden County Regional Planning Commission showed that there will be substantial adverse impacts on the county highway network if traffic from a Pyramid Mall is added to expected future traffic volumes. These conclusions were hotly disputed by Pyramid representatives.

The two witnesses went on to say that a proposed Pyramid Mall would result in unsafe traffic conditions at the interchange of Interstate 89 and Route 2A in Williston. It now appears that if a Pyramid Mall was built, a number of intersections would have to be upgraded and that a partial clover-leaf would have to be built at Exit 12 on Interstate 89. These improvements could cost as much as \$1 - \$3 million.

In a related development, the State Transportation

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Agency (which must issue a "highway access permit" before the proposed Mall can open) has decided that all necessary highway improvements must be built **before** the permit will be granted. Pyramid has two choices: either to pay for these improvements itself at an enormous cost but at a saving in time, or to wait until the State builds them. Since state highway investments must be made in accordance with a 10-year transportation plan, it could take years before these improvements work their way to the top of the State's priority list, if indeed they ever come to the top of the list at all.

(3) Air Pollution

Air quality officials in Montpelier are recommending that the Pyramid Company be denied an air quality "certificate of compliance." This certifies that the development meets Vermont's air quality laws. Officials cite unacceptably high concentrations of carbon monoxide that would be particularly acute at the Interstate 89 ramps, at Tafts Corners, at Industrial Drive in Williston and at Five Corners in Essex Junction. The denial of an air quality certificate of compliance would be a blow to Pyramid's chances of getting an Act 250 permit. Criterion No. 1 of Act 250 states that a proposed development must not result in "undue air pollution."

(4) Fiscal Impacts on Neighboring Communities

The first testimony on the economic impacts of the proposed Mall on neighboring communities was heard during February.

On February 28, a retail Market analyst from Washington, D.C. presented evidence on the effects that a Pyramid Mall would have on the retail sales structure of Chittenden County. The market analyst concluded that if the Mall was built, the City of Burlington could expect to lose as much as \$21 million in retail sales. Retail sales in Williston, on the other hand, would increase to \$44 million.

Even though the effect of a proposed development on an area's retail merchants is not directly relevant to the Act 250 hearing process, the conclusions of the market study are important. These conclusions lay the foundation for subsequent testimony by other experts on the fiscal impact of the Mall on the tax revenues to state and local governments. This is an issue that must be considered under Criterion No. 9 of Act 250.

(5) Stormwater

During the week of March 6, VNRC, the Lake Champlain Committee and the Williston Committee for Responsible Growth presented evidence on the effects of stormwater runoff from the proposed Pyramid Mall.

An expert witness, called by the three environmental groups, testified that stormwater runoff from a shopping mall would be highly polluted by lead, zinc and oxygen-demanding substances. When the stormwater is added to the discharges from municipal treatment plants located along the lower Winooski River, dissolved oxygen (D.O.) levels would fall below minimum standards during low-flow conditions.

While the stormwater issue is not expected to stop the Mall (since Pyramid can treat its stormwater to reach acceptable levels prior to discharge), it does raise questions about the State's stormwater management policies and the magnitude of growth that can ultimately occur in communities bordering the lower Winooski River.

(6) Concluding Remarks

Many months ago the Pyramid Company announced that it would start construction on March 20, 1978, providing that it had all of its permits in hand.

March 20, 1978 will come and go and there will be no construction.

The Pyramid case appears to be headed for an appeal, and probably to the courts. Whether the Mall is ultimately built or defeated, the market forces that attracted Pyramid Company to Vermont continue to exist. Unless the lessons of the Pyramid case are learned, the same problems and issues will be raised again.

"Will the parties who participated in the Act 250 hearings in the Pyramid Mall case be there a second time with the same vigor should another challenge be raised?"

This is very much an open question. Given the thousands of dollars of consultant fees, hundreds of hours of hearings, thousands of hours that citizens and state officials have borrowed from other obligations, I doubt society's ability to confront a similar application through the Act 250 process a second time around.

It is for this reason that I am going to devote an article in the April **Vermont Environmental Report** to the lessons that may be drawn from the Pyramid Case.

Darby Bradley
VNRC Staff Attorney

**NATIONAL
WILDLIFE
WEEK**
MARCH 19-25, 1978

Municipal Hydro-Power: Is It An Answer?

Towns all across the state, Springfield, Brattleboro, Middlesex, Worcester, (last year Barre), to name a few, have been exhibiting an interest in the idea of municipally-owned hydroelectric power facilities.

As early as January 1975, Selectmen in the town of Springfield announced their intention of forming a municipal power company for the purpose of harnessing energy from a string of dams along the Black River. Under Vermont law a municipality may purchase the plant and property of private utility companies. Since 1975 the town of Springfield has been locked in a series of legal battles with the Central Vermont Public Service Corporation (CVPS). CVPS owns facilities and transmission lines that are crucial to the development of municipal hydro power in Springfield. CVPS is reluctant to give up its plant and property without a legal fight.

As recently as February 21, 1978, Selectmen in the town of Brattleboro in a 3-2 vote authorized Town Agent John S. Burgess to seek permission to intervene in the federal licensing proceedings on the 70-year-old Vernon hydroelectric dam. This action is the first in a long line of legal steps that Brattleboro must take in seeking to establish a municipal electric company to displace the Central Vermont Public Service Corporation. The current CVPS electric rate for residential users in Brattleboro is 4.4 cent per kilowatt hour. James Stiles, of the newly-formed citizens' group, Community Action for Safe Energy, claims that if the municipal power project in Brattleboro is pursued successfully, residents in the town could be provided with electricity at about one cent per kilowatt hour.

In Montpelier, Ennis Gidney, Chief of the Economic Division at the Vermont Public Service Board, expresses some skepticism at the growing enthusiasm over the idea of municipally-owned hydroelectric power and the saving that some people are predicting might result to consumers.

It is true, admits Gidney, that, taken together, "municipals" provide lower rates to their residential customers than private utilities. In the year ending December 31, 1976,-- Vermont's 15 municipal power companies supplied their residential users with electricity at a cost of 3.458 cents per kilowatt hour. Vermont's seven private utilities in the same year supplied their customers at a cost of 4.262 cents per kilowatt hour. This was 23% higher than the municipals. Vermont's two electric cooperatives topped the list. In 1976, they supplied electricity to residential customers at rates of 5.091 cents per kilowatt hour.

These comparisons represent average rates per kilowatt hour for each of the three classes of electric power suppliers in Vermont: municipals, private utilities, and cooperatives. But take each electrical supplier separately and you get a different reading. The lowest electric rates in Vermont for residential users are provided by Vermont Marble, a private utility, at 2.535 cents per kilowatt hour. Next in line is Barton Village, a municipal, with rates of 2.635 cents per kilowatt hour. Then comes Franklin Electric, another private utility, with rates of 2.944 cents per kilowatt hour.

Gidney explains some of these inconsistencies when he says, "A lot of municipals own hydro sites that were built years ago and are now paid for. If you started out today (with the same sites) your rates would be five times higher." The implication from Gidney's remarks is clear. Towns that think they are going to save thousands of dollars by going "municipal" and "hydro" may be in for a big surprise. When everything is tallied up it could be a big bonanza for lawyers representing private utility companies and the towns. What is more, because of inflation, the cost of building or restoring hydro sites could be so high as to make the savings in electric rates to the consumer almost insignificant. That's the way Gidney sees it.

"SMALL HYDRO" REPORT AVAILABLE

The Vermont State Energy Office has released the final report of the Tourin-Musica Small Hydro Demonstration Project. This report describes the successful effort of the Tourin family of Duxbury, Vermont to renovate a small (30 kw) hydroelectric site. The project was carried out with funds from the New England Regional Commission. These funds are no longer available. **Single copies of the report are available by writing the State Energy Office, State Office Building, Montpelier, VT., 05602. Please send \$2.00 in check or money order to pay for the cost of printing and postage.**

EDITOR'S NOTE: *Malcolm Moore of Marlboro and Hugh Henry of Chester have become the first two persons to respond to an invitation to become volunteer correspondents for the Vermont Environmental Report in their respective parts of the state. The VER invites VNRC members who would be willing to serve as correspondents in their local areas to get in touch with Nat Frothingham, VNRC, 26 State Street, Montpelier, VT., 05602, or call (802) 223-2328.*

1978 General Assembly:

A Final Push Towards Adjournment

As the 1978 General Assembly "trudges up March hill" toward eventual adjournment sometime in April, -- seasoned observers such as Chief Legislative Draftsman, Bill Russell, are calling this a "hardworking, productive Session." But whether the 1978 Session will have compiled an acceptable environmental record by the time the final hammer falls is still open to question.

Already there have been a number of reversals.

At the start of the Session, the Vermont Public Interest Research Group (VPIRG) set as a major legislative goal, the adoption of strengthening amendments to the state's Container Deposit Law. What VPIRG wanted were amendments that aimed at requiring lower-cost, energy-saving refillable bottles, instead of just returnables. The House Natural Resources Committee reasoned that the moment was not right to adopt such amendments, and in a 9-2 vote, the Committee tabled the amendments, effectively killing them for this Session.

There were other reversals.

There was H.479, a bill that gave every promise of addressing the problems of the impact of road salt on public water supplies, on vegetation, on the corrosion of automobiles. H.479 began as a proposal to study and regulate the use of road salt. By the beginning of March this bill had been so badly emasculated that VPIRG's Leigh Seddon commented sadly, "The salt bill is now being massacred to the point where we cannot support it. They have removed the provision for monitoring salt levels along highways. They have also changed the bill's legislative intent to reaffirm the bare roads policy of 1971."

Perhaps the most troubling feature of the 1978 Assembly is the Governor's and the Legislature's apparent inability this year, as last, to come to grips with the really vexing, obdurate problems facing the state.

In a letter addressed to Governor Snelling, two liberal House Democrats, Rep. Anne Just of Warren and Rep. William Field of Chelsea, attacked the Administration's failure to articulate an effective energy policy for Vermont.

Representatives Field and Just told the Governor bluntly. "You have not provided leadership to the Legislature in areas concerning (energy) conservation. Your legislative program included one conservation measure, the "gas guzzler" bill (H.666, a tax on gas guzzling cars, based on EPA mileage estimates) which remains in the House Transportation Committee. You

have not provided leadership to the Legislature encouraging the development and implementation of renewable energy. Your legislative program contains no recommendations to encourage alternate energy research or conversions. The Administration has revealed a fundamental misunderstanding of energy problems by talking about abundant energy in the future without taking necessary action in the present to assure that abundance."

Rep. Henry Carse, Chairman of the House Natural Resources Committee, had similar deep concerns. Looking out of the upstairs window of his State House committee room, Carse surveyed the massing of cars at the 4:30 p.m. afternoon traffic pile-up in Montpelier. He wondered aloud at the continued national decline in natural resources, the enormous balance of payments deficit that was accumulating. He likened the situation in the United States today to the decline of Great Britain following World War II. He said that all the pressures at the moment were "for jobs, to get people employed." He observed that the present situation reflected a belief that very little can be done about energy at the State level. He had sharp memories of the winter of 1973-1974 during the Arab Oil Embargo. It could happen again. Recalling that painful time, four years ago, Carse said, "That winter of 1974; nothing moved."

Another of the tough questions facing Vermont is how to get a grip on a state land management policy. In the wake of regional development proposals such as Pyramid Mall in Williston, the need for creating effective land management mechanisms seems all the more urgent.

Here again, the Legislature seemed unable to move forward. The Governor had proposed S.59, a bill that would have dropped a provision for a land use plan from Act 250. All during January the Senate Energy & Natural Resources Committee struggled with S.59, producing one draft after another of the bill. Finally, it emerged from Committee with a land management plan and a state capital investment plan. Just as it seemed that some progress had been made S.59 was referred to the Senate Agriculture Committee, where it appears to have died for lack of support.

If the General Assembly was stymied in efforts to reach a consensus on the really big, difficult questions confronting the state, it did seem to be inching forward with other more manageable proposals.

Late in February, H.294, a long and densely-worded bill calling for sweeping reorganization of the Public Service

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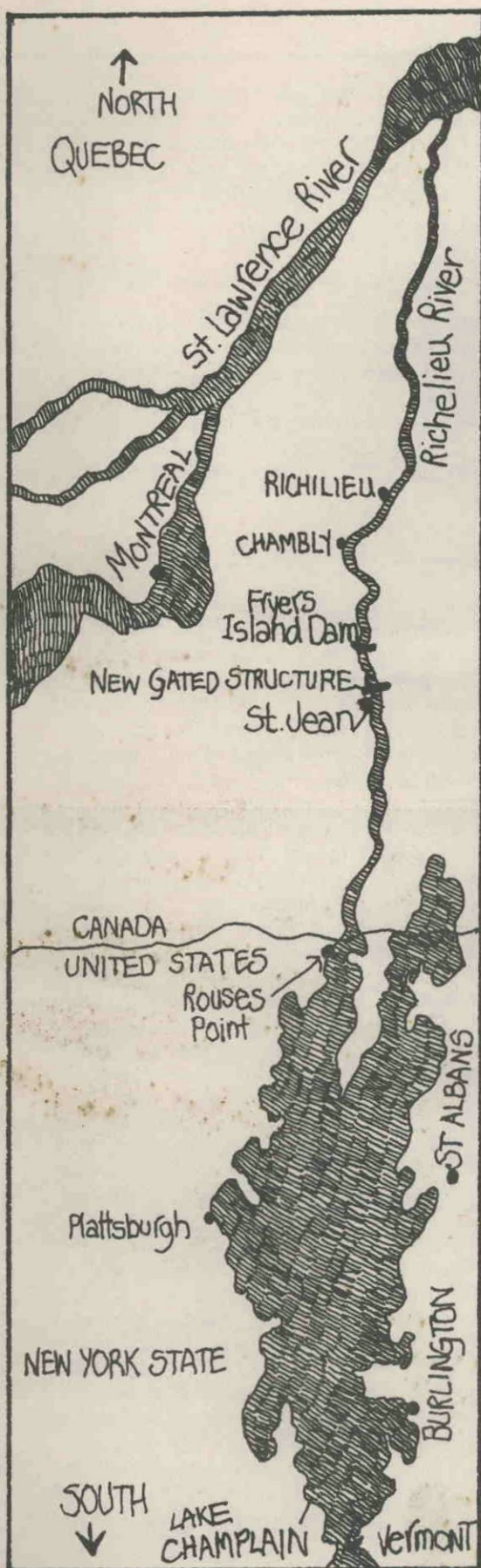


Illustration by Wendy Edelson

Lake Champlain Basin: Hard Choices to Make

This "Special Report" in the March 1978 Vermont Environmental Report attempts to be a faithful summary of a December 1977 international study team report on Lake Champlain and the Richelieu River. This VNRC Special Report is not intended to endorse or challenge the findings and recommendations of the international study team; simply to summarize these findings and recommendations for the benefit of our readers.

Discussions between the United States and Canada that have been going on since the early 1900's have been brought to a head by the recent release of a report entitled **Regulation of Lake Champlain and the Richelieu River.**

This report was commissioned by the governments of the United States and Canada in May, 1975. It is the work of Canadian-American study team known as the International Champlain-Richelieu Board. It cost more than \$2 million to produce and runs to hundreds of pages of text in four separate volumes. It represents the latest attempt to address the question of how to regulate the high waters of both Lake Champlain and the upper Richelieu River to alleviate flooding.

On December 31, 1977 the Champlain-Richelieu Report was submitted to the International Joint Commission (IJC). The IJC is a six-member, Canadian-American body with three representatives from Canada and three representatives from the United States. The Commission will be responsible for reviewing the findings of the report and will eventually decide whether or not the recommendations of the international study team will go forward to the U.S. and Canadian governments for further action.

History of Water Regulation Efforts

The first Canadian-American effort to control the flooding of high waters in Lake Champlain and the upper Richelieu River took place in 1937 when the International Joint Commission approved the construction of a flood control works known as Fryers Island Dam, near St. Jean, Quebec. Fryers Island Dam never succeeded in achieving its flood control objective. This is because the recommended dredging and a system of dykes that would have made the project operative were never completed.

Since 1969 there has been acute flooding in both the United States and Canada. Over the long term the annual rise and fall of Lake Champlain has fluctuated between 94 and 99 feet. Flood damage commences at about 97 feet and increases rapidly when the elevation of the Lake exceeds 100 feet. On April 4, 1976 a water level of 101.51 feet was recorded for Lake Champlain at Rouses Point, New York. In 1976, flood damages in the United States totaled an estimated \$4,031,300. In the same year, flood damages in Canada cost an estimated \$3,417,200.

The Canadian and American governments had already begun to take action. In March, 1973 the two governments put out a call to the International Joint Commission to make a detailed study of ways to alleviate high water conditions in Lake Champlain and along the Richelieu River. The IJC responded by appointing an International Champlain-Richelieu Engineering Board. This Engineering Board submitted its report in September, 1974. In its report the Board said that the study period had been too short and the funds too limited "to undertake a more complete investigation of possible environmental consequences of regulating Lake Champlain water levels."

In May, 1975 another international study team with far wider academic representation and far more comprehensive study goals was appointed by the IJC. One of the central concerns of this new study team was the question of what the environmental impacts would be on Lake Champlain and the Richelieu River of any proposed water regulation works. This second study team was known as the International Champlain-Richelieu Board. This Board submitted its report on December 31, 1977. Its report is the result of an intensive study of the environmental, physical and economic effects of regulating Lake Champlain and alleviating flood damage in the Lake and along the Richelieu River.

Lake Champlain & the Richelieu River

The Lake Champlain-Richelieu drainage basin occupies the northeastern corner of New York State, a large portion of western Vermont, and a small portion of the Province of Quebec.

Lake Champlain is the sixth largest fresh water lake in the United States. It is exceeded in size only by the five Great Lakes. It has a total length of 107 miles from north to south and a maximum width of 12 miles. It lies almost entirely in the United States. The total area of the Lake is 490 square miles with only 17 square miles in Canada.

The Richelieu River lies entirely in Canada. The Richelieu River drains Lake Champlain and pursues a northwards course for nearly 85 miles. It begins at the Lake Champlain outlet along the international boundary near Rouses Point, New York and empties into the St. Lawrence River at Sorel, Quebec.

A critically important feature of the Richelieu River is the fact that the volume of outflowing water from Lake Champlain is controlled by a natural shoal, or barrier, of tightly-packed glacial till. This shoal, at St. Jean, Quebec, plays a pivotal role in controlling the level of the Lake and the River. The report of the International Champlain-Richelieu Board underlines this fact in saying, "This shoal, located about 23 miles from the international boundary, forms a natural dam which controls the level of the Richelieu River and Lake Champlain."

It is hardly accidental that the upper Richelieu River particularly that stretch approaching St. Jean and for a few thousand feet beyond, has become the focal point in any plans to regulate the waters of Lake Champlain and

to relieve flooding both in the Lake and on the upper Richelieu. It is the St. Jean shoal that is causing the problems. It restricts the outflow of the Lake and during excessive runoff causes flooding on low lying areas around the Lake and along the River.

Organization of the Canadian-American Report

The International Champlain-Richelieu Board has organized its findings into three separate reports.

The first report is from an "Environmental Impact Committee."

A second report is from the "Net Benefits Committee."

And a third report is from a "Physical Aspects Committee."

Environmental Considerations

The major finding of the Environmental Impact Committee was this, "that the Lake's and River's wetlands and their resources, the plants, fish and wildlife, are extremely important to the local economy as well as being aesthetically essential to the Lake Champlain basin."

These wetlands comprise some 52,000 acres and provide spawning, nursery or nesting habitats for the area's biological productivity.

In the course of their field investigations, Canadian and American scientists examined the relationship between seasonal fluctuations of the waters of Lake Champlain and the Richelieu River and the rise and fall of plant and animal populations.

The Committee found that lake and river levels do affect plant and animal species. In their studies of the northern pike, a fish that indicates the survival potential of other marine life, the Committee found that the pike spawns in very shallow water, starting when spring floods are on the rise. The Committee found that water levels during the wintering and breeding seasons are one of the major controlling factors of muskrat populations. In short, the Committee found that many organisms, particularly those whose early life stages occur in the wetland and inshore areas, are dependent upon the yearly fluctuations of water levels.

The Environmental Impact Committee recommended that the natural seasonal rhythm of lake level fluctuations not be disturbed. The Committee advised that all possible non-structural methods of flood protection be examined, evaluated and implemented, or eliminated entirely, before a structural control of high water conditions was instituted. If a regulation works is built, then the Committee recommended that the management of such a structure conform to a strict schedule of environmental regulation criteria. The Committee has drawn up such an environmental regulation plan. If such a plan was followed, the Committee said, "the extreme lake levels could be reduced and an acceptable ecosystem maintained."

Non-Structural Alternatives

The Net Benefits Committee devoted attention to several non-structural alternatives that might be employed to relieve high water conditions in Lake Champlain and the upper Richelieu River.

The Committee encouraged the adoption of an effective flood forecasting and flood warning system, saying, "The flood plains of the upper Richelieu River and Lake Champlain shoreline in many respects are ideally situated in terms of *time to react* (our italics) to a flood warning system." This is because high water levels usually occur in the spring and because lake and river systems rise and fall over an extended period of time.

An effective flood forecasting and warning system would include three elements. First, it would include an accurate "flood forecasting model," a mathematical scheme capable of predicting rising water levels in the river and the lake.

Second, it would include a flood warning communications network, employing radio, television and the press to alert the public to the dangers of high water.

And third, it would include a public information program capable of describing the effectiveness of various measures to reduce floodwater damage. Such measures might be sandbagging, dyking, or the removal of goods to higher ground.

The Committee examined flood proofing or the raising of structures on the flood plain. Flood proofing might include waterproofing the walls and openings of a building. Then there is raising,-- physically lifting buildings above anticipated water levels.

The Net Benefits Committee noted that the acquisition of threatened structures or the relocation of such structures off the flood plain onto higher ground provides the maximum degree of flood damage reduction. In their studies, the Committee examined three plans for the relocation or evacuation of threatened structures away from the flood plain.

The Committee considered the proposal of purchasing development rights on all undeveloped land within the 100-year flood plain. The cost of this alternative on an annual basis is estimated to be \$2,796,000.

The Committee explored the idea of flood plain regulation. The Committee urged the full compliance in the United States with flood plain regulations required under the "Flood Insurance Act." In Canada, a mapping program of major (100-year) flood plains is underway. After this mapping is completed, the Committee called for a refusal to support further development in flood prone areas unless such development is adequately flood-proofed. The Committee favored an increase in flood plain zoning regulations. Such an increase would be translated into the creation of "development-free" zones in both the United States and Canada.

In addition to considering each of the non-structural alternatives in isolation, the Committee considered several combinations of such alternatives together with an estimate of their benefits and costs.

Structural Alternatives

The Physical Aspects Committee was asked to undertake studies to determine the engineering feasibility, costs and impact on water levels of three structural alternatives. Channel dredging through the St. Jean shoal was an engineering activity common to all three structural alternatives.

There were therefore four engineering projects studied by the Physical Aspects Committee. These were: (a) channel dredging; (b) a fixed crest structure at St. Jean; (c) a gated regulation works at St. Jean; and (d) improvements to the existing Fryers Island Dam, some five miles downstream or north of St. Jean.

Channel Dredging: The Physical Aspects Committee states that channel dredging would be required for each of the three structural alternatives. The Committee says, "The shoal at St. Jean constitutes a natural barrier in the river. The effective length is about 3,500 feet and it functions as a natural weir (small dam) to control outflows from Lake Champlain. Any regulation scheme would require a channel cut through this shoal to provide increased channel carrying capacity (at high water levels in the spring). To prevent minimum lake levels from dropping below natural elevations and to ensure proper lake level management, an artificial control would be necessary (to prevent low lake levels at other times of the year)." Plans for excavation call for a channel with a bottom elevation of 85 feet. The channel would be 8,000 feet long and would have a width of 700 feet. The cost of this operation would be \$3,300,000 in Canadian dollars.

Fixed Crest Structure: A fixed crest structure would essentially be a submerged dam across the entire width of the Richelieu River at St. Jean shaped like a ramp. At its base the fixed crest structure would be 45 feet high. Its crest, or highest point, would be 92.85 feet. The fixed crest structure would provide a significant lowering of flood peaks. It would maintain lower lake levels close to the natural range. The estimated cost of a fixed crest structure is \$4.6 million not including the cost of channel dredging. It has the lowest average annual costs and the highest benefit/cost ratio of the three structural alternatives. A fixed crest structure has **no moving parts** and it **cannot be manipulated** to regulate water levels. It would operate at a fixed elevation and it would not satisfy environmental regulation criteria.

Gated Regulation Works: The gated regulation works would be a dam, above water, with six steel gates. Each gate would be 100 feet wide. These gates would be attached to concrete piers and would span the distance between these piers. The gates would be hinged on the downstream side of the river and would be capable of rising 8 or 10 feet. The gated structure meets the criteria for environmental management. The Committee estimates that a gated structure, built at St. Jean, would eliminate 60% of the annual flood damages in Lake Champlain and the upper Richelieu River. It could be constructed at a cost of \$16 million.

Improvements to Fryers Island Dam: The existing Fryers Island Dam was completed in 1939. It would require some improvements before it could be used as a water level control structure. The major expense would be dyking and the drainage improvements required to protect property from the pool of water that would accumulate in front of the dam at times when higher water levels were required to maintain Lake Champlain elevations. The improvements to Fryers Island Dam would cost an estimated \$9.9 million. Even with improvements the dam would fail to satisfy the most stringent environmental regulation criteria.

Recommendations of the Study Team Report

The International Champlain-Richelieu Board makes essentially five recommendations.

(1) The Board states that it cannot recommend a non-structural alternative by itself, because, at best, non-structural alternatives could only eliminate 20% of the flood damage.

(2) The Board **does recommend** non-structural measures such as flood forecasting, flood warning, and the adoption of flood plain regulation. These measures

would be carried out in combination with, or in addition to, a structural alternative.

(3) The Board comes down on the side of constructing a new gated water regulation structure at a cost of an estimated \$16 million. The Board points out that this gated structure would fully meet the most stringent environmental criteria, and that it would eliminate 60% of the flood damages.

(4) The Board recommends equal cost sharing between Canada and the United States for the construction of a gated structure and the subsequent operating and maintenance costs of the new water control works. It calls for equal Canadian-American cost sharing for the capital costs of a flood forecasting and warning system.

(5) Finally, the Board calls for additional environmental studies over the initial ten years of operation of the new structure. The Board also recommends that biologists, wildlife specialists and other environmental management experts be included on any body that is created to supervise the control of the new works involving water levels on the Lake or along the upper Richelieu River.

Citizen Participation & The Review Process

The Report of the International Champlain-Richelieu Board was submitted to the International Joint Commission on December 31, 1977. This report is now being studied by the IJC. Sometime in the next several months the IJC will decide whether or not to accept the report and recommend that it be implemented. Should the IJC approve the report, the final decision on the recommendations would lie with the U.S. Congress and President Carter and with the Canadian Parliament and the Ottawa government. (Under U.S. federal law it is possible that an environmental impact statement may be required before U.S. funds can be spent.)

The Report of the International Champlain-Richelieu Board has been circulated to public interest groups in the United States and Canada. The Lake Champlain Committee in Burlington has asked a number of its members to conduct a thorough review of the Board's findings and recommendations. The Lake Champlain Committee will be articulating its position by the end of April. The Vermont Natural Resources Council is also studying the Canadian-American Report and will be announcing its position in late April.

The Champlain-Richelieu Board has announced tentative plans for three all-day public hearings on the report. These hearings have been tentatively scheduled in Burlington, Plattsburgh, and St. Jean, sometime in the week beginning Monday, June 5. These are open, public hearings. Written testimony will have the advantage of increased press attention, but anyone will be permitted to come forward and speak and all remarks will become part of the formal record.

The Lake Champlain Committee is the "lead" organization in responding to the Report of the International Champlain-Richelieu Board. The Lake Champlain Committee is ready to answer questions from persons who may wish to know at a later date of the exact place and times of the three public hearings on the report. For this information, write Anne Riegelman, Executive Director, Lake Champlain Committee, 80 St. Paul Street, Burlington, Vermont, 05401, or call (802) 658-2119.

The Board of Directors of the Vermont Natural Resources Council will be deliberating on its position on the Champlain-Richelieu Report during April. VNRC asks its members to make comments on the Canadian-American Report as a way of advising the VNRC Board. Please direct written or spoken comments to Seward Weber, Secretary of the VNRC Board, 26 State Street, Montpelier, VT., 05602, or call, (802) 223-2328.

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Board, passed the Vermont House. Whether it would survive intact in the Vermont Senate was very much an open question. In its present form, it promises to provide a new structure for the controversial Public Service Board, with independent and well-supported planning, regulatory, advocacy, and adjudicatory functions.

Early in March, Governor Snelling signed H.8 into law. This was a bill to establish a fragile areas inventory in the state. The Vermont Natural Resources Council had worked to raise public consciousness to the importance of protecting natural areas. The passage of H.8 was therefore a deeply satisfying culmination to VNRC's work.

Then there was H.298, a proposal by Governor Snelling to devote \$124,000 to an inventory of the state's forest resource and to establish a Forest Resource Advisory Council. VNRC lobbyist, Seward Weber, expressed appreciation for the Governor's leadership in taking this step. Said Weber, "One of the most hopeful things to our way of thinking that has happened in this session is the surfacing of a real interest on the part of the Governor in the state's forest resource.

There were other gains.

H.549, a bill to regulate the transportation of hazardous materials passed the House and went to the Senate. There was discussion of H.604, a bill to limit to \$150 the annual user fee that any Vermont household would pay if connected to a public sewer system. The same bill would authorize the state to use federal funds to allow rural communities to experiment with alternative wastewater treatment systems.

The Legislature seemed to be in a mood to consider ideas that had not been discussed in earlier sessions.

For the first time, in this session, there was debate on the Miller Formula, on the House floor. For the first time, a bill was introduced to protect consumers against the costs of decommissioning the nuclear power plant at Vernon. (No one thought this bill would pass this year. But it was being considered.) There was a stirring of interest in H.683, a bill that would prohibit utilities from passing along to consumers in the rate base the

cost of "Construction Work in Progress." There was talk about wetlands protection.

Of all the signs of fermentation at work in the Assembly, perhaps the most significant was the preliminary passage of H.361 by an overwhelming vote of 144-1 in the Vermont House. H.361 would permit towns to tax productive forest and farming land on a "use" as opposed to a "fair market" value basis. This idea has been debated in the halls of the Legislature for years.

Ben Huffman who wrote the classic study entitled, *The Vermont Farm* back in 1973, has been leading the fight as a lobbyist for the passage of H.361 both this year and last. Huffman has become a familiar figure in the corridors of the Assembly. Patiently, doggedly, Huffman has urged the need and the logic of a bill to change the way that productive land is taxed. Earlier in this session, Huffman said, "Whether a thing happens depends on whether people think it can happen." He went on to say, "For the first time I feel that we have people who are eager to push this thing. There is money around. People feel it has a chance."

For Huffman, indeed for all the foresters, farmers, citizens who have worked for land use tax reform over the past several years, the passage of H.361 on a 144-1 vote was an electrifying moment. Huffman was sitting in the visitors' gallery in the well of the House. The size of the vote, the enormity of the House endorsement, after so much patient work and so much waiting, seemed in Huffman's words, "almost an embarrassment."

What Huffman said about H.361 might well be applied to a host of environmental bills that are still pending and that are now moving over to the Vermont Senate for further consideration. Huffman was taking nothing for granted. Because H.361 had passed the House was no guarantee it would pass the Senate. Huffman was sending out a call to any Vermonter who cares about the survival of forest and farming land. Said Huffman, "It is terribly important to tell people of H.361's importance. Tell them it has a chance. Ask people to register their point of view with the Vermont Senate."

VERMONT LAW SCHOOL 'ACTIVIST GROUP' WILL SPONSOR ENVIRONMENTAL AWARENESS DAY

The Environmental Activist Group at the Vermont Law School in South Royalton has announced plans for an Environmental Awareness Day for Tuesday, April 18. The Activist Group is sponsoring a series of activities that are open to the general public. At 4:30 p.m. there will be a panel discussion at the Law School on

the subject, "Opportunities in Environmental Law & Related Fields." There will be a pot-luck dinner at 6:00 p.m. At 7:30 p.m. there will be a second panel discussion on the subject of "Act 250 Regulation." The program will close with a wine and cheese reception at 9:00 p.m. For further information, write Joan D. Sarles, Environmental Activist Group, Vermont Law School, Box 25, South Royalton, Vermont, 05068, or call Ms. Sarles between 4:30 and 6:00 p.m. at (802) 763-7335.

MARTIN JOHNSON:

Summing It All Up & Looking Ahead

In a February 16th letter to Governor Snelling, Martin Johnson resigned as Secretary of the Agency of Environmental Conservation. Johnson first came to the Agency in 1971 when he was appointed Commissioner of Water Resources by Governor Davis. In 1973, he was appointed Environmental Secretary by Governor Salmon. He was reappointed by Governor Snelling in 1977.

It was Wednesday morning, March 1st. A late winter sun was streaming through a south window of the fourth floor, corner office and Martin Johnson, who is stepping aside as Environmental Secretary after more than five years, talked like a man who was at rest with his decision.

"When I came here," said Johnson, "it was VNRC and the Lake Champlain Committee and the Vermont Institute of Natural Science in Woodstock. Now," says Johnson, "the number of environmentalists has grown and broadened. And those numbers include snowmobilers, cross country skiers, farmers."

Johnson talked about the role of the Secretary of the Agency of Environmental Conservation. "It's a leadership role, an enunciating role," he explained.

Quickly changing his emphasis, Johnson remarked, "I think the people are the ones who have achieved things."

Johnson talked about the passage of a billboard control law in 1967 and a container deposit bill in 1972. "The billboard law would not have passed," said Johnson, "if the people had not risen up and demanded it. The people passed the container legislation, the bottle thing. The people saw that they, in fact, could make a difference." And Johnson concluded, "Those two bills have been far more successful than their strongest backers ever thought possible."

"Ten years ago," Johnson remembers, "no one believed that we would clean up the waters in this state. They put the Winooski in as a 'Class C' river from Marshfield all the way to Burlington."

Johnson credits the success of the Vermont water pollution control effort to people by the thousands in one community after another across the state who went behind a curtain in a polling booth and voted in favor of the bond issues. "We have more projects ready to go today than money to fund them," said Johnson. "When I came here the water pollution program was \$2 million. This year it will be \$28 million."

Johnson likens the environmental situation facing Vermonters today to the confusion that we witnessed in 1968 and 1969. There are a host of new problems. People are frustrated in seeking to describe them. There is fermentation in public thinking. Eventually, says Johnson, these new problems will be described, articulated, and mechanisms will be invented to address them.

One of these current problems is what Johnson refers to as "resource allocation." Here is a choice between letting the foreign corporation rule on how we allocate the resources of the state or doing the job ourselves. "I would like to put the people in charge," says Johnson about decisions that will soon be made about allocating the state's resources for different uses. The competitors are lining up. People can see this happening. But they don't know how to get hold of it.

"What are we really going to do with the forests, with prime agricultural land, with energy in Vermont?" Johnson asks.

"Are we going to do this for the future of people who are here and who are alive?" he asks. "Or are we going to allocate resources for the maximum benefit of all the people in the long term?"

Then Johnson goes ahead to offer his own views.

"It doesn't make any sense to allocate prime agricultural land for shopping centers. It doesn't make any sense to repeal the capital gains tax on land. It doesn't make any sense to generate more electricity when we are wasting what we do have. It doesn't make any sense to weaken standards to achieve some other goal."

"Water is a key resource," observes Johnson. "How are we going to use it? Are we going to build hydro sites everywhere?" Then he talks about recreation and fishing as legitimate competing uses. Then there are forests. The forest is many things: wildlife habitat, fuel, building supplies, aesthetic enjoyment. "It's not an 'either-or'"

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situation," Johnson cautions. "It's a matter of making intelligent choices. How do you do it so that it works?" One thing Johnson is sure of is that forestry programs and fish and game programs will become much more important in the years ahead.

Despite the problems that face us in Vermont, Johnson refuses to give way to pessimism.

He measures the resources of the state. "We have people," he says, "and that is the strong overriding resource. We have basic resources: sunshine, water, soil and air. All of those are in good shape in Vermont." We can grow our own food. We have plenty of water. Most places do not. Johnson goes on to observe that for energy, for development, in more and more places, water is becoming the limiting resource. "There is an awful lot happening," says Johnson. "There are a great many talented people." He notes that people are putting in wood stoves, car pooling. People are looking into solar energy, considering it. "I think the most exciting times are still ahead of us," says Johnson. "I certainly think Vermont will make it if anyplace will make it."

Johnson reserves some of his sharpest rebuke for the disappointing performance of the State Department of Education. "It has been a monolith that we have not had much success in breaking through to. I am very disappointed that the Department of Education has not played a much, much larger role in environmental affairs." Johnson sums up the effect of much of what passes for education in this way, "I think a lot of our educational effort is for the purpose of turning out

consumers to satisfy the status quo, to keep young people in the consumer racket."

The lackluster response of the Department of Education is hardly the whole story. Johnson is encouraged by the work of the Vermont Institute of Natural Science (VINS) in Woodstock. VINS is reaching schoolchildren throughout the state with an environmental education program. "The towns are willing to pay for it," says Johnson approvingly. When the Department of Fish and Game holds a teachers' workshop, these workshops are full. Johnson speaks enthusiastically of private schools such as Putney and Stowe where young people are raising their own food and putting it on the table. The Agency of Environmental Conservation has summer camps for young people that reach about 1200 kids.

"What about Johnson's successor as Environmental Secretary?"

Here Johnson is completely confident not only that Governor Snelling will fill the post in a timely fashion, but that the Governor will appoint a person with proven qualities of leadership - someone who is intimate with Vermont, and an honest environmentalist.

"It's a total immersion job," says Johnson about the Agency post he is leaving. It requires the kind of person who will stand up in front of audiences all across the state and lead them, and do that again and again, night after night. "It's going to be a person," says Johnson about his successor, "who is well-directed, who has a good self-image, and who is committed to it."

LETTERS

To the Editor:

I cannot believe the bureaucracies related to small town politics.

Recently a government grant was initiated, voted on and passed by the Town of Bolton. Needless to say not all were notified, only those who were known to approve of the South River Road Improvement.

There is no need to pave this road. It is a beautiful secondary road. We have so little left in our countryside. I cannot believe that the government taxes which we pay can be so unjustly used to the advantage of a few who are obviously interested only in the monetary benefits from such a project.

This particular project will remove lovely old trees and natural landscaping done only by nature.

I am a taxpayer, both through my payroll check and as a resident of Bolton, and I was **not** notified of any hearings and/or meetings.

Why does every bit of countryside left in the State of Vermont have to be made a metropolis?

Lorraine Gordon
Jonesville, Vermont

Not A Hammer!

This is not meant to hammer anyone on the head, at least not HARD on the head, but.... After this month the Council will not be sending copies of the Vermont Environmental Report to members who have not renewed for 1978. Two renewal notices have been mailed to members since mid-January. A reminder will be forthcoming within the next several weeks, -- so don't despair. If you haven't renewed yet, just dig around in your bill pile, or wait until the next notice arrives.

FISH & GAME ACCEPTING CONSERVATION CAMP APPLICATIONS FROM YOUNG VERMONTERS

The Vermont Fish & Game Department is accepting applications from young Vermonters, both boys and girls, aged 12 to 15 years old, who want to attend the Green Mountain Conservation Camps this coming summer.

The Fish & Game Department is running one-week, separate sessions for boys and girls at two locations, at Lake Bomoseen in Castleton, and at Buck Lake in Woodbury. The week-long sessions will begin on June 18 and continue until August 19. The purpose of the camps in the words of the Fish & Game announcement "is to give young Vermonters a chance to learn about our natural resources, to understand them well enough to be able to use and enjoy them now without jeopardizing them for the future."

Courses will include: wildlife identification and management, forestry, woodsmanship, forest fire prevention and control, boating safety, first aid, and hunter firearms training.

Tuition is \$25 per student, all inclusive. Actual cost of instruction and support for each student is \$65, but the Fish & Game Department pays the \$40 difference. Camp

applications are available by writing: State Wildlife Laboratory, Roxbury, Vermont, or by calling, (802) 485-7567.

WINDHAM COLLEGE WILL SPONSOR SOLAR ENERGY SEMINAR IN APRIL

Beginning Wednesday evening, April 5, and continuing on Wednesday evenings for four weeks, Windham College in Putney, will be holding a seminar on the subject, "Using Solar Energy in the Home."

The solar energy seminar will be taught by Jeremy Coleman, a staff member at Total Environmental Action in Harrisville, New Hampshire. Coleman is a specialist in basic solar energy, passive solar building, and greenhouse design. He is currently heading research on development of a low cost solar collector. He was solar construction supervisor for the Goosebrook Solar Home in New Hampshire and has built several solar homes.

The solar energy seminar will be held from 7:00 to 10:00 p.m. on April 5, 12, 19, and 26, with field trips on Saturday April 15 and 29. Tuition is \$40. For further information write, Continuing Education Seminars, Windham College, Putney, VT., 05346, or call, (802) 387-5511.

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ADDRESS CORRECTION REQUESTED

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